invention, involving another novel use of touch sensitive components. Each embodiment of this class of devices has a display **101** with a touch screen on its front surface, and a separate touch-pad **1810** on the back of the device, where the touch-pad **1810** can be used for scrolling, panning, or otherwise moving displayed content—but the touch-pad **1810** is not used for selecting displayed selectable items (such as links, buttons, or other selectable items on Web pages or applications), while the touch-screen over the display **101** (or one or more extra controls that the device maker may include on the device) can be used for selecting items. Preferred embodiments of this class of devices would generally be programmed to respond to movement of the user's finger on the back touch-pad **1810** by moving displayed content in the same directions as the finger moves, whether that's up, down, left, right, on any angle, in circles, or along essentially any other path: In this way, the user feels as if he or she is just pushing the "page" of content around within the frame of the device. For example, if the user is looking at a Web page that is too large to display all at once, and the user wants to quickly take a look at content that appears to the lower right of the lower-right corner of the frame, the user can slide their finger along the back touch-pad toward the upper left of the device, and the content would pan in that direction, revealing that content that had been off the edge of the frame to the lower right. A reasonable alternative embodiment would be to move the content in the opposite direction of the finger's movement across the touch-pad, as though the user is moving the frame around a fixed page (rather than moving the page beneath a fixed frame). Another embodiment would let the user choose (through a configuration setting) whether movement of a finger on the back touch-pad should move the content in the same direction as the finger or in the opposite direction.

[**0260**] Another alternative embodiment (perhaps less compelling, but one which is cover in the present invention anyway) would be to move a cursor around the display in the same direction as the user's finger on the touch-pad, and only scroll the content when the cursor gets to the edge of the device. As with other embodiments here, the scrolling mechanism and the selection mechanism are still separate in this embodiment. The user could move the cursor to a position, and then (as an example of one selection mechanism a device maker could implement) tap the device's side to select the item under the cursor.

[**0261**] In one of its simplest preferred embodiments, the device would just have a touch-screen and display **101** on the front, and an extra touch-pad **1810** on the back, with no extra controls—not even an on/off power button. Note that a device can be designed so that contact (or certain types of contact, such as a double-tap in a given amount of time) with the touch screen on the front or the touch pad on the back can turn the device on or off, so an on/off button may not be necessary. When the device is on, a "shut down" command (by any appropriate name) could be provided in a menu to allow turning the device off or putting it to sleep.

[**0262**] Yet another preferred embodiment that is nearly as simple would just add one button—an on/off power button (either mechanical or touch sensitive). For example, a power button could be placed on the top of the device or on one side.

[**0263**] Yet another preferred embodiment would be a class of devices in which each device in the class adds one or more touch sensitive areas, in addition to the touch pad **1810** on the back of the device and the touch screen & display **101** on the front of the device. And a particularly preferred embodiment of this class would be one with the four touch sensitive spots illustrated in **FIG. 19** (items **1903**, **1904**, **1905**, and **1906**), and a modifier spot **1201** as discussed earlier. A preferred embodiment can also include extra items, such as a memory or I/O card slot **1310**, as found on many PDAs.

[**0264**] **FIG. 20** illustrates another preferred embodiment in which the touch-pad **1810** is placed on the inside of a display cover **2001** that can rotate on a hinge **2002** around to the back of the device **100** so that when the user is viewing content on the display **101** on the front of the device they can operate the touch-pad **1810** now exposed behind the device.

[**0265**] Notable subclasses of the preferred embodiments just discussed in association with **FIG. 18**, **FIG. 19**, and **FIG. 20** are classes with devices with displays that have pixel counts between 240 and 600 pixels vertically and between 480 and 800 pixels horizontally and pixel densities between 100 and 200 pixels-per-inch. A notable smaller subclass consists of devices with pixel counts between 360 and 460 pixels tall and between 500 and 764 tall, with pixel densities between 130 and 168 pixels-per-inch, and where the devices are no more than 5.5 inches wide and no more than 4 inches tall.

[**0266**] An alternative and known way to allow scrolling of a displayed content (which is not incompatible with those covered here) is to let the user move the content around simply by touching any part of the displayed content that is not a link, button, or other selectable item, and then dragging their finger as though they are dragging the content around within the frame. Yet other embodiments of the present invention include devices that use this scrolling mechanism in combination with a display that is between 320 and 600 pixels tall and between 480 and 800 pixels wide, with a pixel density between 125 and 168 pixels-per-inch, and where the device is no more than 6 inches wide and no more than 4.4 inches tall. A relevant subclass consists of devices that are less than 5 inches wide and which have between 360 and 480 vertical pixels and between 500 and 760 horizontal, and a pixel density between 132 and 161 pixels-per-inch. (All ranges "inclusive".) Most users may find that using a back touch-pad as outlined in earlier embodiment descriptions is more intuitive.

[**0267**] As an improvement over current device designs that use mechanical controls, one class of embodiments also covered in this description of the present invention is one in which each device in the class has one or more mechanical controls along the bottom of the device (for horizontal scrolling and optionally other functions) and one or more mechanical controls along the side of the device (for vertical scrolling and optionally other functions). A notable subclass is one in which the device has one roller or jog-dial control on the bottom and one roller or jog-dial control on the side (as illustrated in **FIG. 17**-A), where the roller or jog-dial control on the bottom is used for horizontal scrolling and the roller or jog-dial control on the side is used for vertical scrolling. Another notable subclass of this class is one in which the device's display at 320 pixels tall and at least 480 pixels wide. A preferred subclass of the general class is one in which the display is between 500 and 760 pixels wide and